

Title (en)  
ELECTRIC PARKING BRAKE DEVICE

Title (de)  
ELEKTRISCHE FESTSTELLBREMSVORRICHTUNG

Title (fr)  
DISPOSITIF DE FREIN DE STATIONNEMENT ÉLECTRIQUE

Publication  
**EP 4119812 A1 20230118 (EN)**

Application  
**EP 20924799 A 20201218**

Priority  
• JP 2020043290 A 20200312  
• JP 2020047372 W 20201218

Abstract (en)  
Provided is an electric parking brake device in which a drum brake includes braking gap automatic adjustment means and a parking brake lever, and the operation of an electric actuator that drives the parking brake lever is controlled by a control unit. When an application operation time of the electric actuator (38) by the time when a parking brake state is obtained has exceeded a predetermined application operation end determination time (T2), the control unit (C) determines that the braking gap automatic adjustment means (18) is abnormal. With this configuration, at the time of obtaining the parking brake state, the presence or absence of abnormality in the braking gap automatic adjustment means can be determined.

IPC 8 full level  
**F16D 66/00** (2006.01); **B60T 8/17** (2006.01); **B60T 13/74** (2006.01); **B60T 17/22** (2006.01); **F16D 65/22** (2006.01); **F16D 65/54** (2006.01)

CPC (source: EP KR US)  
**B60T 1/067** (2013.01 - KR US); **B60T 8/17** (2013.01 - KR); **B60T 8/885** (2013.01 - EP US); **B60T 13/74** (2013.01 - KR); **B60T 13/741** (2013.01 - EP); **B60T 13/746** (2013.01 - EP US); **B60T 17/22** (2013.01 - EP KR US); **F16D 51/22** (2013.01 - EP US); **F16D 65/22** (2013.01 - EP KR US); **F16D 65/52** (2013.01 - US); **F16D 65/54** (2013.01 - EP KR); **F16D 66/00** (2013.01 - EP KR US); **B60T 2250/06** (2013.01 - EP); **B60T 2270/406** (2013.01 - EP); **B60Y 2400/81** (2013.01 - KR); **F16D 2066/003** (2013.01 - EP US); **F16D 2121/04** (2013.01 - EP); **F16D 2121/24** (2013.01 - EP US); **F16D 2125/60** (2013.01 - EP)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4119812 A1 20230118**; **EP 4119812 A4 20231025**; CN 115279636 A 20221101; CN 115279636 B 20230922; JP 7417709 B2 20240118; JP WO2021181808 A1 20210916; KR 20220137744 A 20221012; US 2023166703 A1 20230601; WO 2021181808 A1 20210916

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**EP 20924799 A 20201218**; CN 202080098420 A 20201218; JP 2020047372 W 20201218; JP 2022505769 A 20201218; KR 20227030994 A 20201218; US 202017910635 A 20201218